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Docket Number (Optional)		
PRE-APPEAL BRIEF REQUEST FOR REVIEW		JAR- <b>829-618</b>
	Application Number	Filed
·	10/720,764	November 25, 2003
	First Named Inventor YONEMARU	
	Art Unit	Examiner
	2826	DICKEY, T.
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.		
This request is being filed with a notice of appeal.		
The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.		
I am the ☐ Applicant/Inventor		Signature
Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b is enclosed. (Form PTO/SB/96)		Joseph A. Rhoa
M Attornoy or agent of record 27.545	Тур	ped or printed name
Attorney or agent of record 37,515 (Reg. No.)		703-816-4043
(1.0g. 1.0.)	Reques	ster's telephone number
Attorney or agent acting under 37CFR 1.34. Registration number if acting under 37 C.F.R. § 1,34		October 22, 2007 Date
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*		
★Total of 1 form/s are submitted.		

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

YONEMARU Atty. Ref.: 829-618; Confirmation No. 3114

Appl. No. 10/720,764 TC/A.U. 2826

Filed: November 25, 2003 Examiner: DICKEY, T.

For: SEMICONDUCTOR INTEGRATED LOGIC CIRCUIT INCLUDING TWO PMOS

TRANSISTORS CONNECTED IN SERIES AND TWO NMOS TRANSISTORS

CONNECTED IN SERIES

\* \* \* \* \* \* \* \* \* \*

October 22, 2007

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Pursuant to the OG Notice of July 12, 2005, applicant hereby requests a pre-appeal brief review of this case for at least the following reasons.

Claim 1 stands rejected under Section 102(e) as being allegedly anticipated by Robinson.

This Section 102(e) rejection is respectfully traversed for at least the following reasons.

Claim 1 requires that "the first cell functions as a logic operation circuit for outputting data, and the second cell functions as a driver circuit for driving the logic operation circuit and a data retaining circuit for retaining data output by the logic operation circuit; and wherein the first PMOS transistor and the second PMOS transistor are connected directly in series, and/or the first NMOS transistor and the second NMOS transistor are connected directly in series." Thus, for example, referring to Fig. 4 of the instant application the first cell (e.g., S1) functions as a

logic operation circuit (e.g., 2) for outputting data, and the second cell (e.g., S2) functions as a driver circuit (e.g., 1a-1e) for driving the logic operation circuit (e.g., 2) and a data retaining circuit (e.g., 3) for retaining data output by the logic operation circuit (e.g., 2).

The Office Action contends that the first cell and second cell recited in claim 1 correspond to the barrel shifter 62 and the clocked inverter 66, respectively, in Robinson. In addition, the Office Action contends that the clocked inverter (alleged second cell) 66 functions as a driver circuit for driving the barrel shifter 62 and as a dynamic latch.

However, contrary to allegations in the Office Action, the clocked inverter 66 of Robinson does not function as a driver circuit for driving the barrel shifter 62. The clocked inverter 66 together with a second inverter 67 dynamically latch the output of the barrel shifter 62 (see [0050] of Robinson). See clocked inverter 66 in fig. 9 denoted with reference numeral 70. The clocked inverter 66, 70 receives the output of the barrel shifter 62 as an input IN. Thus, the clocked inverter does not drive the barrel shifter 62. It appears as if the final Office Action contends that the clocked inverter 66 is a driver circuit for driving the barrel shifter 62 because the clocked inverter 66 includes a pull-up transistor 79 and a feedback path exists. However, although a feedback path may be present, such feedback path is only between the output OUT and input IN of the clocked inverter 66, 70. That is, there is no feedback path from the clocked inverter 66, 70 back to an input of the barrel shifter 62 in order to drive the barrel shifter. The pull-up transistor merely performs voltage level restoration at the output of the barrel shifter (see [0053] of Robinson). Accordingly, it will be appreciated that the clocked inverter 66 in Robinson does not function as a driver circuit for driving the barrel shifter 62. Thus, Robinson fails to disclose or suggest that "the second cell functions as a driver circuit for driving the logic

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operation circuit and a data retaining circuit for retaining data output by the logic operation circuit' as recited in claim 1.

In the Advisory Action dated September 28, 2007, in response to the applicant's argument that the clocked inverter 66 (alleged second cell) in Robinson does not function as a driver circuit for driving the barrel shifter 62 (i.e., alleged first cell), the Examiner states that the "Applicant provides ABSOLUTELY NO GUIDANCE AS TO THE MEANING OF THE TERM, "DRIVER CIRCUIT." Furthermore, the Examiner states in the Advisory Action that "drive" is defined in the 1992 edition Academic Press Dictionary of Science and Technology as "application of voltage or power signals to a system circuit, or device to cause it to perform its intended function". Based on said definition of "drive", the Examiner argues in the Advisory Action that "the feedback circuit in Robinson's second cell 66 applies a voltage to the pass transistors of first cell 62 to perform voltage level restoration. This voltage level restoration is allegedly a "driving" function because it causes these pass transistors to perform their intended function. Therefore, the Examiner argues that the feedback circuit is a "driver circuit" for first cell 62.

However, the Examiner's allegation is incorrect. Robinson discloses that "[when] pass transistors are used to implement the barrel shifter 62, high level output signals from the barrel shifter experience voltage degradation." In order to <u>prevent</u> such voltage degradation, the pull-up transistor 79 in the clock inverter 66 is used to perform voltage level restoration. Specifically, the voltage level restoration is performed by turning on the pull-up transistor 79 so that the input of the clock inverter 66 is coupled to the supply voltage Vdd, which supplies the desired high level voltage (see, e.g., paragraph [0053]). In other words, pull-up transistor 79 in the clock inverter 66 performs the function of <u>preventing</u> voltage degradation of the high level output

signals from the barrel shifter 62 by restoring voltage level within the clocked inverter 66 itself, not in the barrel shifter 62.

Based on the definition of "drive" provided by the Examiner, in order for the clocked inverter 66 (i.e., alleged "second cell") to "drive" the barrel shifter 62 (i.e., alleged "first cell"), the clocked inverter 66 needs to apply a voltage or power signal to the barrel shifter 62 (i.e., "first cell") to <u>cause</u> it to perform its intended function. However, as discussed above, the clocked inverter 66 does <u>not</u> apply a signal to the barrel shifter 62 for <u>causing</u> the barrel shifter 62 to perform its intended function, since a signal from the clocked inverter 66 is <u>not</u> input into the barrel shifter 62. Therefore, contrary to the Examiner's allegation, the clocked inverter ("second cell") 66 does not function as a driver circuit for driving the barrel shifter 62.

In addition, the Examiner alleges that on page 3 of the Remarks submitted by the Applicant in response to said Final Office Action, the Applicant admits that (a) the clocked inverter 66 provides a signal to the barrel shifter 62, and that (b) said signal is needed to provide voltage level restoration required for the proper functioning of the barrel shifter 62. Applicant disagrees with these allegations. Specifically, on page 3 of the Remarks, applicant stated that "there is no feedback path from the clocked inverter 66, 70 back to an input of the barrel shifter 62 in order to drive the barrel shifter." In other words, applicant argued that the clocked inverter 66 does not provide a signal to the barrel shifter 62. Since applicant argued the non-existence of the signal, (b) certainly was not admitted in any respect.

As discussed above, the rejection of independent claim 1 and dependent claim 8 as being allegedly anticipated by Robinson should be withdrawn. Moreover, in a similar manner, rejection of claim 6 for being obvious over Robinson in view of Murakami should be withdrawn.

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It is respectfully requested that all rejections be withdrawn. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

Joseph A. Rhoa Reg. No. 37,515

JAR:caj 901 North Glebe Road, 11th Floor Arlington, VA 22203-1808 Telephone: (703) 816-4000

Facsimile: (703) 816-4100